

WHAT IS CLAIMED IS:

1. A process for treating the surface of a wet surface
heat exchanger so as to build the hydrophilic porous
5 structure,

said process comprising the operation of:

making the coating composition by blending micro
solid particles with the hydrophilic binders;

10 spreading said coating composition on the surface
of said heat exchanger by means of spraying or
dipping; and

curing the coated surface of said heat exchanger.

15 2. A process for treating the surface of a wet
surface heat exchanger according to claim 1, wherein
said micro solid particles is 5 ~ 100 μm in diameter.

20 3. A process for treating the surface of a wet
surface heat exchanger according to claim 1, wherein
the thickness of the hydrophilic porous structure
coating on said surface of a heat exchanger is
adjusted by controlling the viscosity of binder.

25 4. A process for treating the surface of a wet surface
heat exchanger so as to build the hydrophilic porous

structure,

said process comprising the operation of:

roughening the surface of said heat exchanger by
corroding said surface with chemical or
5 electrochemical process, or by use of the physical
process; and

processing hydrophilization of said surface of
said heat exchanger.

10 5. A process for treating the surface of a wet surface
heat exchanger according to claim 4, wherein said
surface roughness is 5 ~ 100 μm in height.

15 6. A process for treating the surface of a wet surface
heat exchanger according to claim 1, wherein the
method for building the hydrophilic porous structure
on the surface of said heat exchanger is:

20 building said hydrophilic porous structure on the
surface of each components of a heat exchanger,
thereafter assembling each components to construct a
heat exchanger; or

building said hydrophilic porous structure on the
surface of a heat exchanger which is assembled in
advance.

7. A process for treating the surface of a wet surface heat exchanger according to claim 4, wherein the method for building the hydrophilic porous structure on the surface of said heat exchanger is:

5 building said hydrophilic porous structure on the surface of each components of a heat exchanger, thereafter assembling each components to construct a heat exchanger; or

10 building said hydrophilic porous structure on the surface of a heat exchanger which is assembled in advance.